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Report of the Committee on University Affairs 1967

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Report of the Committee on University Affairs



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The Honourable William G. Davis, Q.C.
Minister of University Affairs
Room 369
Parliament Buildings
Toronto 2, Ontario

December 31, 1967

Dear Mr. Davis

On behalf of the Committee on University Affairs, I have the honour to present a report of the activities of the Committee during the past year. For the sake of perspective, and since it has not heretofore been customary to make formal annual reports on behalf of the Committee, it seemed appropriate that a general review of activities since 1964 also be presented.

As well as reporting on formal actions of the Committee, it is hoped to convey some indication of matters of current concern as related to work now in progress and possible future developments.

Yours sincerely
Douglas T. Wright

Chairman, Committee on University Affairs

Report of the Committee on University Affairs Introduction

Terms of Reference — The Committee on University Affairs operates under terms of reference established by order-in-council* which charge the Committee:

“to study matters concerning the establishment, development, operation, expansion and financing of universities in Ontario and to make recommendations thereon to the Minister of University Affairs for the information and advice of the Government”.

Within these broad terms the Committee acts in response to requests from the Minister of University Affairs for advice on matters of concern, in response to representations from universities, singly and collectively, and on its own initiative.

Membership — The present membership of the Committee is as follows:

Dr. Douglas T. Wright (Chairman)

Dr. M. Elizabeth Arthur

Professor of History, Lakehead University

Dr. Arthur N. Bourns

Professor of Chemistry and Vice-President (Science), McMaster University

The Honourable Leslie M. Frost, P.C., Q.C.

Dr. George E. Gathercole

*Chairman, The Hydro-Electric
Power Commission of Ontario*

Dr. Reva Gerstein

Mr. James O'N. Hughes

President and Chairman

A. E. Ames and Company Limited

Dr. Maurice J. Lavigne

*Manager, Physical Metallurgy Department
Falconbridge Nickel Mines Limited*

Mr. Robert W. Mitchell, Q.C.

Vice-President

Supertest Petroleum Corporation Limited

Dr. Roger J. Rossiter

*Professor of Biochemistry, Dean of
Graduate Studies, The University of
Western Ontario*

Dr. David W. Slater

*Professor of Economics, Dean of
Graduate Studies (designate)
Queen's University*

The members of the Committee serve under annual renewable appointments made by order-in-council. Dr. Floyd S. Chalmers and the Honourable T. D'Arcy Leonard who had been members of the earlier Advisory Committee on University Affairs, both retired from the Committee in 1965 because of the heavy pressures of other duties and after having given valuable service to the Committee. The loss by death of

* Order-in-Council No. 4157/64; December 17, 1964.

Dr. J. A. MacFarlane (in April 1966) and of the Honourable Dana Porter (in May 1967), who had been Chairman of the Committee until February 1967, is noted with great regret; both of these men had served the Committee with vigor and distinction. Dr. K. W. Taylor retired from the Committee in November 1967, after three years of diligent service.

Dr. D. T. Wright, who had been a member of the Committee since 1964, became its first full-time Chairman in March 1967. Dr. J. R. McCarthy was Secretary to the Committee until January 1, 1967, when he was succeeded by Mr. E. E. Stewart.

Scope of Concern — The Committee on University Affairs is concerned with the fourteen provincially supported universities (Brock, Carleton, Guelph, Lakehead, Laurentian, McMaster, Ottawa, Queen's, Toronto, Trent, Waterloo, Western, Windsor and York), and, as well, with Scarborough and Erindale Colleges of the University of Toronto, Algoma and Nipissing Colleges of Laurentian University, the Ontario College of Art, the Art Gallery of Ontario, the Royal Ontario Museum, and the Royal Botanical Gardens. Until 1967 the Committee on University Affairs was also concerned directly with Osgoode Hall Law School but, as will be described later, this institution will become part of York University in July 1968.

During the past several years, the conjunction of the influences of high birth rates in the post-

war years, immigration, and rising educational accomplishments and expectations have led to an almost explosive rate of growth in university enrolments in Ontario, a rate of growth that seems to be the most rapid in any jurisdiction in the Western world. Ten years ago, in 1957-58, total full-time enrolment in provincially assisted universities was 22,100. It increased fifty per cent to 32,700 in the five years to 1962-63, and then more than doubled to 73,805 in the five years to 1967-68. The annual enrolment increment in this last period has been about 10,000—equivalent to the addition of a major university every year. Continuing growth at this rate is expected for several years.

The Committee on University Affairs naturally has been concerned both with meeting the demands of such growth and with the financial implications which inevitably have been associated with an increasing dependence on Government for both university operating and capital support. The Province of Ontario adopted some years ago the policy of providing facilities and opportunities for all young people to pursue higher education who were qualified and desirous of doing so. While the short-term burdens of providing such opportunities are great, the long-term benefits both to individuals and to society at large are still greater. The annual reviews of the Economic Council of Canada, especially that

of December 1965, have presented clear and compelling arguments for the support of education, particularly higher education, in terms of the very high rates of economic return on such investment. Beyond views of higher education as investment lies the significance of the university as agent for the transmission of the heredity of culture, and the sense of university study as a personal, cultural experience of intrinsic value.

The university is, of course, a unique institution in society. Its history may be traced in an unbroken line from medieval times. While preserving sufficient stability to sustain the idea which gave it birth, the university as a social institution has generally kept pace with the mutations in society to remain relevant to the society which supports it. The goals of the university have always been hotly debated. Mass higher education and the usefulness of knowledge (a fairly recent development) have led inevitably to the multiversity, identified with such clarity by Clark Kerr. But the pressures of numbers and of finance and the magnet of research have, at least in the United States, caused the professor virtually to abdicate undergraduate teaching to the graduate assistant. It is no accidental irony that Kerr's own University of California should have been the focus of revolt by students against what seemed to them to be a dehumanized university. In our happy Canadian way, following a respectful few

paces behind the United States, these problems are much less critical. Nevertheless, students are challenging the goals and the notions of authority within the universities. To some this is a welcome change from that archetype apathetic student who sees university experience only as some higher kind of vocational training.

Whatever redefinition of goals results from the current debates the resources that may be allocated for their fulfillment will be limited. When resources are limited choice must be made between alternative goals; very often, these choices have not been made consciously. There is little appetite for systematic planning; "foot-in-the-door" budgeting is found time and time again. Effective management is required to maximize benefits from limited resources. Such a notion of management is entirely consistent with the ideal of university autonomy. Only within the institutions, in the Senates and Councils, can priorities be ordered and the necessary decisions taken.

The most important function of the Committee on University Affairs relates to the formulation, for consideration by Government, of policies affecting all universities. The other principal task of the Committee is the provision of advice on levels of operating support needed, from year to year, and on needs and priorities in capital spending. The Committee is also concerned with such matters as new legislation, program devel-

opment in universities, and the establishment of new institutions.

In responding to such circumstances, the Committee on University Affairs has been well aware of the delicate balance required in providing for the needs of such a rapidly expanding system without extravagance or waste, while at the same time preserving the effective autonomy of individual institutions. In its efforts to develop general policies the Committee on University Affairs has been most concerned with finding effective bases for development and total fiscal control related to overall function, as opposed to any movement towards overt control of detail. Such an approach is consonant with current trends toward program/performance budgeting in the public sector. Because some questions transcend the individual university it may become necessary to think in terms of a "collective autonomy", as recently proposed by Eric Ashby*, to provide diversity with interdependence and to present a common front on matters of vital importance.

Meetings — The Committee on University Affairs meets approximately 20 days a year. The most time-consuming activity of the Committee is the consideration of university operating grants. In 1967 the Committee met 22 days and inaugurated the practice of holding regular meetings at university campuses, with meetings in Toronto, London, Ottawa, Peterborough, St. Catharines,

Sudbury and Waterloo. In addition to its meetings with representatives of individual universities, the Committee has met once or twice each year with the chairmen of the board of governors and presidents of the universities, and on several occasions with representatives of the Committee of Presidents of Universities of Ontario.

The Committee on University Affairs recognizes the Committee of Presidents as representing the Ontario universities collectively. Effective communications with this group are well established, and the Chairman of the Committee on University Affairs regularly joins the meetings of the Committee of Presidents for informal discussion.

*Eric Ashby. *Ivory Towers in Tomorrow's World*. Journal of Higher Education, v38, n8, pp. 417-427, (November, 1967).

Committee Organization

The organization of the Committee on University Affairs provides for the Committee as a whole to participate in hearings and prepare recommendations. In addition, however, three subcommittees were established in April of 1965: a Subcommittee on Finance, principally concerned with the establishment of objective bases for operating grants, a Subcommittee on Student Aid, and a Subcommittee on Research and Graduate Studies. In May 1967 a Capital Studies Subcommittee was created. The subcommittees have been primarily concerned with the detailed studies required for new policy formulation, and they have usually worked with corresponding subcommittees appointed by the Committee of Presidents, thus assuring the most effective cooperation as well as the consideration of all possible concerns.

In subsequent sections of this report more detailed reviews will be given of the work of these subcommittees. The Subcommittee on Student Aid, under the Chairmanship of Dr. J. A. MacFarlane, concerned itself with some of the general issues involved. The subsequent development of the Ontario Committee on Student Awards, which reports in an advisory capacity directly to the Minister of University Affairs, and which includes representatives from the Committee on University Affairs and from the universities and other post-secondary institutions, has effectively supplanted

the earlier efforts of the Student Aid Subcommittee on University Affairs.

The Department of University Affairs provides the Secretariat for the Committee on University Affairs and its subcommittees. The Committee is thus able to operate effectively with only a small permanent office staff.

Many of the particulars dealt with in this report have been discussed by the Committee of Presidents in their first Annual Review, "System Emerging".* That document might well be read in conjunction with this report, which is naturally not intended to provide a complete review of all university activity in Ontario, but rather deals with the particular activities and concerns of the Committee on University Affairs. A companion report by the Department of University Affairs provides pertinent data and statistical information, which is accordingly not duplicated in this report.

* *System Emerging* (Toronto: Committee of Presidents of Universities of Ontario, 1967.)

Operating Support

Operating grants to universities and colleges have increased very rapidly in recent years, as indicated by the following figures:*

Year	Total Provincial Operating Grants	Total Federal Operating Grants	Total Grants
1957-58	\$ 9,057,000	\$ 4,985,884	14,042,884
1962-63	22,960,000	11,007,916	33,967,916
1967-68	164,380,263	—	164,380,263

This extraordinarily rapid rate of increase of provincial support reflects not only the great increase in enrolment and the higher cost levels associated with the foundation of new institutions, but also reflects the termination by the Federal Government in 1966 of its policy of providing direct university grants and the circumstance that tuition fees have been nearly constant since 1965 and, accordingly, represent a smaller proportion, every year, of total cost.

In the period since 1964 there have been important developments in dealing with the requests from the universities for Provincial oper-

ating support. Until 1967 operating grants were determined on a "deficit" basis. Under this system budget estimates were prepared by the institutions concerned and requests were made for operating grants to balance the budget after allowing for other revenues. With this pattern of operation the universities were obliged to submit proposed lists of expenditures and defend these in interviews with the Committee. Several disadvantages were associated with this pattern of financing. First, and most critically, there was little opportunity for real control over the size of governmental obligation. Second, such a pattern seemed to discourage private financial support in the sense that private contributions might seem to be deducted from the amount of government assistance. Finally, the increasing size and complexity of the Ontario university system necessarily meant that there was a tendency for scrutiny of proposed expenditures to become more detailed year by year with an increasing possibility of encroachment on university autonomy.

*These figures represent only the operating grants provided to the provincially assisted universities, including Osgoode Hall Law School, and to the Ontario College of Art, the Royal Botanical Gardens, and the Royal Ontario Museum. They do not include grants for the colleges of education or the church-related institutions.

Formula Financing

Commencing in 1965, the Committee on University Affairs became concerned with the notion of formula financing and subsequently appointed a special sub-committee (A. N. Bourns, K. W. Taylor and D. T. Wright) which worked together with a corresponding subcommittee appointed by the Committee of Presidents (T. L. Batke, B. Trotter, and R. B. Willis), under the Chairmanship of D. T. Wright, to develop a policy for formula financing.

The task assigned to the two subcommittees was to devise an objective procedure for distributing provincial operating grants to universities that would apply in the same fashion to all provincially assisted universities and which, hopefully, would need little or no adjustment, save compensation for increasing unit costs, for its effective operation over a period embracing several years at least.

Many approaches could have been taken. On the one hand, and perhaps as an extreme, it would have been possible to establish faculty/student ratios; ratios of non-academic to academic staffs; average "approved" salaries; average teaching loads; class sizes; numbers of research students per professor; and the like, faculty by faculty, along with similar norms for administrative functions, thus structuring an approved total level of expenditure which would necessarily be a function of the parameters

established. Such a pattern would clearly have offended the nature of university autonomy, and would not have been in harmony with established practice in Ontario. Provincial grants have not, in general, been earmarked in the past, nor has there been any effort to establish line-by-line budget control. It would certainly not have been consistent with the sincere espousals of support from all quarters for effective university autonomy in Ontario to develop a new approach to financing which itself would be the agent for the erosion of autonomy.

Through the efforts of the joint subcommittees it proved to be possible to establish a simple formula for determining operating grants on an objective basis as a function of (i) enrolments in various categories, (ii) weighting numbers reflecting average costs, faculty by faculty, and (iii) a dollar multiplier, or unit value, which, once fixed, could determine all grants and expenditures.* Formula income was defined to cover all costs of maintenance, book purchases for libraries, and all purchases of equipment (except initial equipping of new buildings), as well as ordinary costs of operation. Most importantly, this system, while acknowledging average levels

* Ontario Committee on University Affairs, *Report to the Minister of University Affairs: A Formula for Operating Grants to Provincially Assisted Universities in Ontario* (Toronto, Ontario Department of University Affairs, 1966)

of cost in different parts of the university, does not, in fact, constrain the apportioning of the university budget to various faculties and departments.

The formula proposal was completed towards the end of 1966 by the joint subcommittees and was approved in principle by the Committee of Presidents. It was recommended by the Committee on University Affairs for adoption and for first use in the determination of operating grants in the 1967-68 session. The unit value for 1967-68 was established as \$1,320. Although the main task was completed the joint subcommittees were not disbanded but have pursued various follow-up work, including the development of necessary interpretations and definitions not fully detailed before, the consideration of formula amendments, and study of a possible general objective basis for extra-formula support for newer institutions that have not yet achieved a viable scale of operation.

The advantages claimed for the formula system are:

1. The resulting grants are demonstrably equitable.
2. University autonomy is clearly preserved.
3. Government is provided with a means of foreseeing and controlling, on a consistent basis, the general magnitude of university and college grants.
4. There is a maximum incentive for the universities to be efficient and to manage their affairs well; any notion that improvement in efficiency would lead to a corresponding reduction in support is offset. Long-range planning of university operations is greatly facilitated.
5. Rather than limiting initiative or imposing any "dead hand of uniformity"*, the formula system gives freedom to the individual institution to order priorities and take necessary decisions.
6. Private donors are assured that gifts for operating purposes are an added resource to the university and not a substitute for public support.

Although experience with formula financing is still limited, it appears that most of the anticipated benefits are being realized. It is certainly clear that the advent of formula financing has stimulated great interest in the universities in resource allocation and in operational analysis, and the like. It is gratifying, as well, to note the interest shown in the Ontario formula by universities and granting agencies in other jurisdictions.

With the adoption of formula financing, it has

* See, for instance: Max Beloff, *British Universities and the Public Purse*, Minerva, v5, n4, pp 520-532 (Summer, 1967).

become possible for the Committee on University Affairs to make important improvements in its annual review procedure. The formula obviates the need for detailed scrutiny of proposed expenditures in each university. Instead, the Committee has been able to concern itself more fully with the general character of university activity and development, with particular respect to the adequacy of current levels of support and their implications for such matters as the recruitment of academic staff, the provision of support for libraries and the equipping of laboratories. While the Committee still requires submissions of certain data on current financial outlays, the new pattern of concern is really more penetrating in terms of qualitative assessments than was ever possible with the budget review procedure previously followed.

The formula, as adopted, cannot provide completely for all requirements. Special extra-formula grants are required for the newer universities and colleges and for major new faculty developments until enrolments reach viable levels. Efforts are continuing to develop a supplement to the formula to provide for such needs. It is, of course, imperative that extra-formula support should be scrupulously limited and that, when granted, be provided for a fixed period only. For the future it will be essential to resist the pressing of special needs outside the formula

except under extraordinary considerations. At the same time, it is to be expected that revisions will be necessary to the formula as more experience is gained.

With the introduction of the formula it was deemed necessary to give explicit recognition to the higher costs of bilingual operation at Laurentian University and the University of Ottawa. After careful analysis, it was recommended, for the 1967-68 fiscal year, that a 7 per cent premium over ordinary formula income be paid to offset such costs.

Part-Time Students

The formula also made it possible to recommend that part-time degree students in Ontario universities be considered in terms of equivalent full-time enrolment in determining operating grants. In the past it had been common university practice to expect income from tuition fees paid by part-time students to offset the full direct costs of teaching such students, leaving indirect costs to be met from general university funds. With the increasing importance of part-time studies and the tendency of the universities to integrate such teaching with ordinary full-time instructional activities, it became apparent that operating grants should similarly not distinguish between

full-time and part-time degree candidates. In 1967-68, 73,805 full-time degree students and 46,320 part-time degree students are enrolled in provincially assisted universities in Ontario. The full-time equivalent of the part-time enrolment is 10,990, representing 12.9 per cent of the total effective full-time enrolment of 84,960.

Denominational Colleges

In late 1966 the Federal Government abandoned its practice of providing direct financial support for university operating costs in favour of a new pattern of unspecified direct fiscal transfer to the provinces. This decision put the church-related colleges and universities in Ontario in a difficult position. Long-standing policy in Ontario prevented direct provincial grants being made to church-related institutions. After careful study it proved possible to substitute equivalent special support, determined as providing 50 per cent of formula income.

Extra-Formula Grants

In 1967-68 extra-formula grants were recommended for the emerging institutions to compensate for enrolments not yet at a viable scale. It is anticipated that a corresponding set of special

grants will be paid in 1968-69, but at reduced levels reflecting enrolment increases. The following table indicates the levels of additional support involved:

Extra-Formula Allowances for New Universities

Institution	Allowance for 1967-68*	Anticipated Allowance for 1968-69*
Brock University	125%	80%
Erindale College	250%	100%
Lakehead University	40%	30%
Laurentian University	40%	30%
Scarborough College	85%	60%
Trent University	125%	80%
York University	15%	7%

In 1967-68 lump sum extra-formula grants were also recommended for new development in Medicine (McMaster and Toronto), Dentistry and Library Science (Western), Law (Windsor) and for the trimester program at the University of Guelph.

As well, grants were recommended on a budget review basis, independently of the formula, for the Royal Ontario Museum, the Royal Botani-

(* Allowances are expressed as percentage of formula operating income which includes grants *and* tuition fees.)

cal Gardens, the Art Gallery of Ontario and the Ontario College of Art, and Algoma and Nipissing Colleges of Laurentian University.

Trends in Formula Unit Value

In preparing a recommendation for the value of the basic income unit for 1968-69, the Committee on University Affairs has had to consider not only ordinary inflationary pressures but, as well, the need to maintain academic salary levels on a competitive basis with those in other jurisdictions, the rapidly escalating costs and rates of obsolescence of library materials and laboratory equipment (both of which must be financed from formula income), as well as the general expenses of maintaining a very rapid rate of expansion of both undergraduate and graduate work in Ontario. The Committee on University Affairs feels that the development of new programs usually should be financed with ordinary formula income rather than from earmarked grants. But, of course, it must then be acknowledged that sufficient income has to be provided to permit necessary development. The committee is considering all such factors and anticipates recommending that the value of the basic income unit for 1968-69 be fixed at \$1,450, providing an increase of approximately 10 per cent from the \$1,320 value of 1967-68.

Future trends are difficult to predict. The largest component of university expenditures is in salaries for academic staff. The academic market is international in scope; the ease with which new academic appointments can be filled in Ontario is directly related to such factors as economic conditions in Britain and the problems of the United States in Vietnam and at home. In recent years Ontario has benefited greatly by attracting from other countries large numbers of academic staff. Aside from such factors, there is some prospect for an easing of the academic market at junior levels — where most new appointments are made. During the past few years not only has enrolment increased rapidly but many new programs have been added, leading to a faster rate of accretion of staff than of students. As a result faculty/student ratios have improved substantially in recent years. Such improvement will not continue indefinitely and the trend may even reverse with little or no loss in quality as students enrol to fill places in programs recently established. The flexibility provided by the formula, with free choice between new appointments, salary improvements and other types of expenditure will not impede such a trend. And the formula will not encourage further new program development except in areas where viable enrolment can be attained fairly quickly. Thus with enrolment growth continuing

New University and College Development

at about 10,000 a year rather fewer new appointments may be needed in the universities in the next five years than were needed in the last five years. Of course the total market for post-secondary academic staff will continue to increase rapidly with the extraordinary growth rate predicted for the new colleges of applied arts and technology. Fortunately, Ontario may be able to be less dependent on importation of academic staff because of the recent expansion of the Ontario graduate schools. For the universities, the greatest challenge will be to provide competitive salaries and conditions to retain able senior people in the face of raiding from the U.S. and from other parts of Canada. If the trends outlined here prove to be valid, university salary policies which have tended, with the pressure of new appointments, to show a fairly small difference between scale minima and average salaries can be expected to change to show greater variations.

A list of the provincially supported universities and colleges in Ontario, arranged according to date of inauguration of work as a non-denominational institution under provincial support (with date of original foundation shown in brackets), shows clearly the rapid pace of development in recent years:

University of Toronto	1850	(1827)
The University of Western Ontario	1908	(1878)
Queen's University	1912	(1841)
Lakehead University	1948	
Carleton University	1952	
McMaster University	1957	(1887)
University of Waterloo	1957	
Laurentian University	1960	
York University	1960	
University of Windsor	1963	(1857)
Trent University	1963	
Brock University	1964	
University of Guelph	1964	
University of Ottawa	1965	(1848)
Scarborough College	1965	
Erindale College	1967	
Algoma College	1967	
Nipissing College	1967	

The creation of new colleges and universities and the further expansion of existing institutions is dictated by the need for the Province to provide more university places for its young people

now and in the future. If the needs of the seventies are to be met it is, of course, imperative that strong nuclei be established now. Moreover, it is desirable that the new institutions should develop separate personalities since the system of higher education in Ontario will be the richer for its greater diversity. It is no little challenge to strive for variety and innovation in academic pattern while maintaining high standards of scholarship and learning, all within realistic constraints on expenditure.

One of the most difficult problems facing the Committee on University Affairs has been, and continues to be, the provision of advice to the government on the financial support required for the orderly and effective development of the newer universities. These new institutions have in most cases been given full university charters, or in such cases as Scarborough and Erindale Colleges, have been tied to existing centres of strength. It is thus clear that there has been no thought of creating "second class citizens" in the community of universities of Ontario. Naturally, the newer institutions aspire to high accomplishments in scholarship, research and service. But the pace of development, and thus the rate at which their aspirations are realized, must necessarily depend upon the financial support that can be made available. Since costs relate most closely to the breadth of program develop-

ment, it follows that there must be some curb on program expansion beyond that required for basic offerings, if such development is to keep in reasonable accord with the expansion of enrolment. The problem is, of course, compounded by the fact that unit costs in the newer universities, with their small enrolments, are much higher than in established universities. The Committee on University Affairs feels that the ordering of priorities of development in the newer institutions should be the responsibility of the individual Senates and Boards of Governors, but that total financial support should be of such an order as to provide for a reasonable rate of transition from the very high costs of the "starting up" period to the lower cost levels associated with ordinary formula grants and viable scales of enrolment.

During the past few years the Committee has met with several groups interested in founding new universities or colleges. There was a clear statement of Government policy on this issue by the Honourable John P. Robarts, Prime Minister of Ontario, in 1963, "It would seem that our present plans . . . call for sufficient universities to meet our needs for . . . the next fifteen years."* Notwithstanding the Prime Minister's remarks,

*Legislature of Ontario Debates, Official Report-Daily Edition, Fourth Session of the Twenty-Sixth Legislature Vol. 2, pp 2002-2011, Thursday, March 21, 1963.

Development in Professional Schools and Faculties

the combination of local aspirations with the realization that great further growth is expected in university enrolment readily leads groups of interested citizens to petition for the development of new institutions. In fact, all major population centres in Ontario now have universities or colleges. Moreover, it is quite clear that the notion of a vigorous independent university college with hardly a thousand students, which might have been practicable in the thirties, is not a part of the picture of a modern public supported system of higher education.

In *Architecture* there had been little expansion in enrolment in Ontario for several years because the Faculty of Architecture of the University of Toronto was operating at full capacity. In 1966 the Ontario Association of Architects initiated a study of the need for an expansion of facilities for professional education in architecture in Ontario*, and a number of universities subsequently expressed interest in developing new faculties of architecture. After review, the Committee on University Affairs recommended to the Minister that two new schools should be founded, one to be opened in 1967 at the University of Waterloo, and the other to be opened in 1968 at Carleton University.

In *Dentistry* there had been an indication from the Report of the Hall Commission on Health Services of the need for further educational opportunities in Ontario, and in 1966 The University of Western Ontario first enrolled students in a new Faculty of Dentistry there.

In *Education* the continuing development of need in the Province for facilities for pedagogic training for secondary school teachers led to the inauguration of the Althouse College of Education in 1965 at The University of Western Ontario and the inauguration of the MacArthur College of

* *Report of the Committee on the Expansion of Architectural Education*, (Toronto: Ontario Association of Architects, 1966).

Education at Queen's University, which will commence instruction in September 1968. Both have been developed in cooperation with the Department of Education following the established pattern of the original Ontario College of Education of the University of Toronto.

In 1966 the Report of the MacLeod Committee on the Training of Elementary School Teachers* recommended that required qualifications for primary school teachers should be raised to degree level. Shortly thereafter, the Minister of Education and of University Affairs announced the concurrence of both departments with the recommendation and indicated that existing Teachers' Colleges would become merged with universities. Since that time studies and negotiations have been pursued and some such transfers are now imminent. While it is clear that local considerations will weigh heavily in the detailed arrangements which are finally made, some general considerations should also prevail. The most important of these is, of course, that if the intended benefits envisaged by the Committee are to be realized, the new schools or faculties should function as fully integral components of the universities.

In *Engineering* the great concern for sufficient

future supplies of qualified manpower that arose in the mid 1950's led numbers of universities to develop engineering programs, so that today there are eight full Faculties of Engineering in Ontario (at Carleton, McMaster, Ottawa, Queen's, Toronto, Waterloo, Western and Windsor) as well as an Agricultural Engineering School at the University of Guelph. For the population served, Ontario has rather more engineering schools than are found in most other jurisdictions. The growth in undergraduate enrolment in engineering has been rather slower than had generally been anticipated, increasing only by about 50 per cent during a period when total university enrolment was doubling. But significantly, graduate enrolments in engineering increased five-fold in the same period. Such developments are, of course, related to important changes in the nature of the practice of engineering, and the development in Ontario of new and high-quality post-secondary diploma programs in engineering technology. Recent trends in enrolment growth, coupled with the fact that larger faculties of engineering are reaching the limit of their enrolment capacity, indicate that most universities with presently small engineering facilities can expect them to attain a viable scale some time in the 1970's. Rationalization might be accelerated and total resources used more effectively if some of the existing schools

**Report of the Minister's Committee on the Training of Elementary School Teachers.* (Toronto: Ontario Department of Education, 1966).

could be merged. It is clear, however, that any such step would have to come as a matter of university initiative. While there is indication that some universities not now operating faculties of engineering or applied science aspire to do so, it seems fairly clear that such development should wait for a number of years.

In *Fine Arts* a number of universities have established, or increased the scope of, programs in Fine Arts within their Faculties of Arts. But with increasing need in Ontario for professional studies in the creative arts, and after hearing representations from York University on this question, the Committee on University Affairs recommended, early in 1967, that support should be provided to permit a new Faculty of Fine Arts to be founded at that institution.

Legal education in Ontario has changed profoundly during the 1960's. The development of the professional Bar Admission Course in 1958 by the Law Society of Upper Canada set the stage for fuller university participation in legal education. During the past three years enrolment in the University of Toronto and in the relatively new schools at Queen's University and The University of Western Ontario have all increased substantially. Negotiations have been completed through which the baccalaureate degree course in Law at Osgoode Hall, formerly operated under the auspices of the Law Society,

will become the Faculty of Law of York University in 1968. This change, and the physical removal of the Faculty to the York Campus, will permit a doubling of enrolment from the present capacity of about 500 and will also make possible the development of fuller programs of graduate studies and research in law. To provide further assistance in meeting the needs for expanded opportunities in legal education, the University of Windsor has undertaken to create a new Faculty of Law and will enrol students for the first time in 1968.

In *Library Science* the Committee on University Affairs has encouraged the development of a new school at The University of Western Ontario which will complement the efforts of the existing schools, not only by providing for increased enrolment, but also by providing different patterns of study and an emphasis on the new information sciences.

The expansion of *Medical Education* in the Province has been well publicized. Significant expansion is occurring in the existing medical schools at Ottawa, Queen's and Western, while at Toronto the freshman intake in medicine is being increased from 175 to 250 to make it one of the biggest medical schools on the continent. As well, a wholly new College of Health Sciences in McMaster University will enrol its first students in 1969 in a new type of program which is

attracting much interest. Concurrent with this great expansion, there are occurring fundamental changes in teaching patterns in medicine. Where, heretofore, almost all clinical teaching was done by medical practitioners on a part-time basis, it is now desired to use more full-time staff.

These changes, the rapidly increasing commitment to medical research, and the very high salaries required to compete with the opportunities offered by private medical practice, make the cost implications for the future quite staggering. Studies are now in hand to determine the implication of new patterns of teaching and to find optimum patterns of resource allocation. While much more work will be required, there is already indication that the total cost of operation of medical faculties of the future, with their extraordinarily heavy commitment to research and their direct involvement in providing health care, cannot be seen simply as the cost of medical education, but must be acknowledged and supported as part of the total commitment by society to the development of health services.

The Ontario College of *Optometry* had been an independent institution since its foundation in 1925. Following lengthy negotiations, the Committee on University Affairs recommended, in 1967, that support be given for the College of Optometry to become part of the Faculty of

Science of the University of Waterloo, and the change has now been completed.

In *Social Work* study has been given to the development of new approaches to professional training in the field, involving particularly the notion of a baccalaureate degree which, with field training, would prepare people for field work without the previously customary requirement of the professional Master's degree. Adopting this line of action, the University of Windsor and Laurentian University have already inaugurated baccalaureate degree programs in Social Work, and the need for people qualified in this field may lead others to follow.

Legislative and Organizational Changes

The Committee has reviewed certain new legislation which had been proposed by individual universities. This included new Acts for Lakehead University and York University which the Committee felt were of a nature consistent with developments at these institutions.

Considerable time was spent in discussions with representatives of the University of Ottawa in respect of their request for a change in the character of the organization of that institution. The Province of Ontario had extended support to the University of Ottawa for its Faculties of Science and Medicine for some years, but other support was not possible because of the denominational character of the University.

The new legislation introduced in 1965 provided for control of the University to shift from the Order of Oblates of Mary Immaculate, in whose hands it had rested since 1848, to an independent Board of Governors. At the same time many other changes, consistent with such a significant shift of authority, were required in the charter. Arrangements were made for the Oblate Fathers to continue to contribute to higher education through the creation of Saint Paul University, which became federated with the new University of Ottawa and which provided for the continuation of programs in theology and canon law.

In 1966 the Committee on University Affairs

considered the establishment of new colleges in North Bay and in Sault Ste. Marie which were proposed as affiliates to Laurentian University of Sudbury. The Committee recommended to the Minister that support be given for the inauguration of work in these colleges, at first-year level only, commencing in the fall of 1967. It is important to acknowledge that while geographical factors make desirable the offering of first-year work in these locations, and such offerings can be operated with customary levels of support, programs above first-year level with their greatly increased scope of course requirements would not be possible without substantial enrolment.

Also, in 1967, the Committee on University Affairs was asked to consider the status of St. Patrick's College in Ottawa which had been founded in 1932 by the English Oblates of Eastern Canada and which had established a Graduate School of Social Welfare in 1948. After discussion, agreements were reached through which St. Patrick's College became an integral part of the Faculty of Arts of Carleton University and the School of Social Welfare became a part of the Faculty of Graduate Studies of Carleton University.

Graduate Study and Research

The development of graduate study and research has been, and remains, a matter of utmost concern to the Committee on University Affairs. It is clear that Canada is farther from being self-sufficient in the supply of people with higher academic degrees than in respect of any other kind of manpower. It has been our great good fortune in Canada to enjoy a relatively large immigration of people with high academic qualifications and, as well, to be able to rely on taxpayers in other jurisdictions for the support of the education of the many Canadian students who have gone abroad for higher degree studies. It is a remarkable accomplishment of the Ontario universities that, during the past decade of frantic growth, graduate enrolment as a percentage of undergraduate enrolment has actually increased. In encouraging the development of graduate work in Ontario it is imperative that programs of such cost and importance be of high quality and carefully planned. Rapid but controlled growth, reasonable enough as a concept, presents certain challenges to traditional patterns of interaction between Government and universities and to fundamental notions of university autonomy.

Extended Graduate Programs

In 1962 at the urging of the then Advisory Com-

mittee on University Affairs, a system of Extended Graduate Program grants was initiated through which universities were given extraordinary grants, which would otherwise have become available only a year later, to accelerate staff expansion to provide a base for increased graduate enrolment. This program went on until 1966, by which time general operating grants had increased greatly and more direct consideration was being given to the higher costs of graduate study.

Province of Ontario Graduate Fellowships

In 1964, again upon the recommendation of the Advisory Committee on University Affairs, the Province of Ontario Graduate Fellowship Program was inaugurated to provide support for graduate students interested in teaching careers in universities and colleges in Ontario. A special feature of this program has been its concentration on the humanities and social sciences fields which had been much less generously treated than the pure and applied sciences in research grants from Federal agencies. This program has won wide acclaim and by 1967 some 2,300 fellowship awards were being made annually.

Spinks Commission

In 1965 the Committee on University Affairs and the Committee of Presidents of the provincially assisted universities undertook jointly to sponsor a study of the development of graduate programs in the Ontario universities. The three-man commission comprised John Spinks, President of the University of Saskatchewan (Chairman), Gustave O. Arlt, President of the Council of Graduate Studies in the United States, and Kenneth Hare, Master of Birkbeck College, University of London, England.

Since the report of the Spinks Commission has been widely distributed* it is unnecessary to review it fully again here. One of the principal recommendations of the report was that a University of Ontario should be created from the fourteen provincially supported universities in the Province. This recommendation found little favour in Ontario primarily because of concern for maintaining the separate personalities of the various universities. In the focusing of interest on this one aspect of the report, some other recommendations have escaped due attention. Since it was presented in 1966 action has been taken in a number of areas along lines recom-

mended by the Spinks Report and more such action can be foreseen in the future.

The development of the appraisals system for graduate programs** under the authority of the Ontario Council on Graduate Studies, an affiliate of the Committee of Presidents, can be seen as a direct outcome of the Spinks study. This system provides the first and perhaps most critical test for a graduate program — academic quality. The structure of the system and the use of external judges seems to provide for the utmost objectivity and fairness. The Committee on University Affairs has recommended that, commencing in 1968-69, graduate programs established after the inauguration of the appraisals system that have not received favourable appraisal should not be supported.

Appraisal is a necessary step in determining the feasibility of inaugurating a new graduate program, but it is not a sufficient criterion. Tests of need must also be applied. Undoubtedly the best assessment of the relevance of a proposed graduate program to the overall development of an individual institution can be formed within that institution. While the system of formula operating grants acknowledges the higher average costs of graduate studies, it will undoubtedly

* *Report of the Committee to Study the Development of Graduate Programmes in Ontario Universities*, (Toronto: Ontario Department of University Affairs, 1966).

** For details see Appendix D of *System Emerging*, (Toronto: Committee of Presidents of Universities of Ontario, 1967).

also give encouragement to specialization in areas where substantial enrolments are possible, and similarly lead university senates to avoid duplication of programs where effective enrolment is not foreseeable. Given the complexities of the issues that affect graduate programming, there is every reason to expect that this process will lead to a highly effective rationalization of effort and resource allocation. To ensure that the efforts of the various universities are complementary, more effective communication must be established among the universities and with the Committee on University Affairs in respect of particular academic disciplines. Some such discussions have already taken place and more are in prospect. The whole question has been well summarized by Dr. J. A. Corry, Principal of Queen's University, in a recent address:

"... universities collectively, as well as individually, will have to settle on priorities over the whole range of legitimate aims and objectives. Every individual or organization that wants to act rationally must do this because life never makes it possible to do all we aspire to do. In part, this can be achieved in higher education by division of labour, sometimes between the universities of Canada as a whole, but more often between the universities of particular provincial systems. The main areas

*for division are graduate work and research, where forbidding costs make division imperative, despite the forbidding difficulties."**

With respect to the newer universities, there has been some lack of clarity in defining their roles in respect of graduate work. It must be acknowledged that academic staff in the newer universities should have effective opportunities for scholarship and research, but this is not necessarily synonymous with the notion of establishing large numbers of new master's or doctoral degree programs. Effective graduate programs require breadth and scope of coverage and can not be mounted in small departments. The Committee on University Affairs has recently recommended that graduate work in the emergent universities should be confined, in the period of emergence, to Master's programs in specified areas which have been approved under the appraisals system. Emergent institutions and established universities should work together in the development of consortia which will allow effective participation in graduate studies for all institutions.

The procedures outlined above, while less formal than a central authority dictating program

*J. A. Corry, *University Education: Prospect and Priorities*, Convocation Address, Queen's University, (Kingston, October 20, 1967).

Direct Research Grants

development, would appear to provide reasonably for both the short-term and long-term interests of the universities and the Province. The great challenge is, of course, to provide the most effective academic programs under the constraints of limited resources.

Some kinds of resources are, of course, so scarce and so expensive that cooperative development is imperative. A policy is being evolved through which digital computer services will be available on every campus in a pattern in which there will be regional groupings, with special capabilities concentrated in centres where they will be available through various kinds of links on an equal basis to all users. Similar prospects for system management may be seen in the case of library collections for graduate study and research.

While the direct support of research has customarily been carried mainly by Federal agencies, the Province of Ontario gave limited direct support to university research for many years through grants made by the Ontario Research Foundation. In 1966 this program was transferred for administration to the Department of University Affairs. Because the program had not been reviewed for some time, the Committee on University Affairs was asked to advise on possible revisions and, in turn, appointed a special study committee comprising W. M. Campbell (Chairman), Director of Research, Ontario Research Foundation; A. D. Allen, Dean of Arts and Science, University of Toronto; G. D. Garland, Professor of Geo-Physics and member of the Institute of Earth Sciences, University of Toronto; H. H. J. Nesbitt, Dean of the Faculty of Science, Carleton University; J. G. Parr, Dean of Applied Science, University of Windsor; J. M. Robson, Chairman of the Department of Physics, University of Ottawa; J. W. Sisam, Dean of Forestry, University of Toronto; A. N. Bourns, Chairman of the Committee on University Affairs Subcommittee on Research and Graduate Studies. The special study committee was asked to consider the scope and objectives of the research grants program, with particular respect to the disciplines to be supported, the relative emphasis to be given to pure and applied re-

search, the level of support required (keeping in mind the Province's contribution through university operating capital and graduate fellowship grants), and the general regulations required to operate the program.

The 1966 report of this study group argued that principal Provincial support for research was provided indirectly through operating and capital grants, and that the best use that could be made of direct Provincial support would be to complement the major grant programs of other agencies. It was suggested that the two principal objectives that should be served through a program of direct research support would be:

1. The encouragement and support of projects of particular value to the welfare and development of the Province of Ontario, and
2. Assistance for junior faculty members to undertake and sustain research activities until such time as they can command more adequate support from other granting agencies.

It was also suggested that subject areas could be arranged as follows:

1. Mathematics and physical sciences
2. Biological sciences, forestry and wildlife
3. Earth and environmental sciences; energy and resources
4. Materials and industrial processes
5. Transportation and communication

It was felt that such a grouping would promote interdisciplinary work. It was further suggested by the study committee that the total amount provided for direct research grants, which had increased from \$230,000 in 1962-63 to \$340,000 in 1966-67, should be increased to \$950,000 for effective operation of the new program in 1967-68.

The Committee on University Affairs accepted the report of the study committee and recommended to the Minister that its suggestions should be adopted. In 1967-68 \$600,000 for grants under this program were provided by the Department of University Affairs.

The question of the extension of the program of direct research support to other areas and disciplines is yet to be considered fully. Such consideration should probably be associated with a careful review of the general implications of present patterns of university research support and a clearer definition of the role of the Province in supporting research. Federal government agencies have come to support most of the so-called direct costs of research, while the indirect costs are borne by the university and thus, in effect, by Provincial grants. In this context, direct costs include provisions for consumable supplies, special travel, the support of research students and a part only of the costs of equipment. It is then left to "indirect" support to cover the por-

tion attributable to research of the salaries of academic staff (probably the largest single cost item in research) and the costs of providing and maintaining the research laboratories and libraries needed, as well as more conventional "overheads". This practice is, of course, very different from that in the United States where almost all direct and indirect costs of research are supported by the research funding agencies. While the Canadian pattern is much more attractive in that the university receives a smaller proportion of total income on an earmarked basis, it is not entirely clear that the Canadian universities take full advantage of it. Quite modest grants in support of the "direct" costs of research often commit very large resources to meet the indirect costs. Such commitment, often unconscious, may of course divert resources from activities more central to the university's purposes. In these terms it may be argued that the Canadian pattern of research support has been a principal cause of the inability, often claimed by the universities, to give adequate research support in the humanities and social sciences.

Yet another aspect of conventional patterns of research support is that virtually all such support is focused on the individual. The notion of the individual scholar is attractive but not altogether realistic. Many kinds of research problems cannot now be attacked effectively except

through interdisciplinary group effort. Human egocentricity and the force of tradition make it difficult for the universities to resist the essentially divisive pressures that come from present research grant procedures. Such practices reflect the time, not long past, when only a few determined and highly creative people in the universities won special research support. Nowadays it seems to be expected that almost all academic staff should receive research grants as a matter of right. If research effectiveness is to be a criterion the present pattern should be modified, at least in part. Moreover, university senates and faculty councils should be as concerned with research programs as they are with educational programs.

The question of the involvement of the university in applied research is also being raised with more clarity and even a sense of urgency. In his recent presidential address* to the Association of Universities and Colleges of Canada, Dr. Walter H. Johns noted:

"We have, in many quarters, tended to glorify pure or fundamental research and to depreciate applied research. I do not for one minute question the value of fundamental research; I only suggest it not be too exclusive in its atti-

*Walter H. Johns. *President's Address*. Annual Meeting of the Association of Universities and Colleges of Canada, (November 1, 1967).

Libraries

tude to higher education nor look down upon its more practical partner. There are many voices being raised today on this note and they are receiving more and more attention as our universities grow and the potential value of research for the benefit of mankind becomes more apparent. . . . The greatest need of society today, . . . is not for more sophistication in our handling of the physical world and its materials, but for a broader understanding of man in isolation and in society.

In short, there must be a conscious effort on our part, as institutions of higher education, to seek a new approach to the social sciences and to direct some of our best minds to the betterment of society itself rather than to the advancement of our knowledge of matter and its properties."

Library resources are required in great and ever-increasing quantities for every kind of undergraduate and graduate study and research. With the encouragement of the Committee on University Affairs, agreement has been reached among the Ontario universities on a policy which suggests that individual university libraries should be effectively self-sufficient in respect of undergraduate programs, that each university should develop collections to support its own graduate specialties, but that graduate and research collections should, in general, be treated as an interdependent resource involving all the universities in the Province and focusing on the bibliographic centre to be established in the new Graduate Library of the University of Toronto. Data assembled by the Spinks Commission suggests that the present collections are not sufficient, at least when considered separately, to support work on the various campuses. One of the greatest problems, in fact, is in the lack of suitable objective criteria for defining library needs. The Spinks Commission used the so-called Clapp-Jordan* formula which employs such rough approximations that it really cannot be seen as a satisfactory basis for planning for a resource that will cost many tens of millions of

*V. W. Clapp and R. T. Jordan, *Quantitative Criteria for Adequacy of Academic Library Collections*, College and Research Libraries, v26, pp 371-380 (September, 1965).

dollars in books and journals, in acquisitioning, and in buildings to house the collections. Clapp and Jordan themselves revealed the extent of research still required when they concluded their paper:

Among the questions requiring answers are:

- What are the tests of adequacy of an academic library collection?
- What correlation, if any, exists between size of student body and size of collection?
- Is there a renewal or replacement cycle? What are its characteristics? Does it affect acquisition, weeding, or the estimates of cost of collection building?
- What constitute adequate resources for graduate work and research in various subjects and at various levels?

The more recent Parry Report* on library resources and needs defines similar concerns and questions. Determination of needs in terms of objective criteria and the development of a special kind of system management to provide best service at minimum cost will require much effort. But the problem is certainly critical enough to justify such effort. The Committee on University Affairs has indicated its willingness to support such investigations.

An important precedent was established when, in 1967, the universities decided to institute a transit system to speed inter-library loan service and sought a special grant to finance the costs of operating the service. After review, it was determined that the service should be paid for by the universities by subscription, from ordinary operating income, rather than by an earmarked grant. The significance of this, of course, is that the universities remain in full control of the endeavour, a factor which might well make this a forerunner to other "system" services.

*University Grants Committee, *Report of the Committee on Libraries*, (HMSO, London, 1967).

Capital Expenditure

The development of a coherent and objective basis for financing university capital construction is one of the principal present concerns of the Committee on University Affairs.

Before 1964 capital grants were made annually by the Province upon the recommendation of the Advisory Committee on University Affairs. This assistance was not earmarked for individual projects but reflected, instead, representations by the universities of their general needs for expanded facilities. During that period the universities realized a significant share of their total capital needs from fund raising campaigns and other forms of private support.

Since July 1, 1964, capital support has been provided through The Ontario Universities Capital Aid Corporation on a project-by-project basis under a cost sharing program. The Provincial Government has assumed responsibility for financing 85 per cent of the approved cost of academic buildings and essential services, 50 per cent of the approved cost of facilities for student unions, cafeterias, gymnasias, and 100 per cent of the approved cost of health sciences projects. The Department of University Affairs developed criteria, through its Architectural Services Branch, against which unit cost levels and space provisions could be judged, and approvals have come to reflect such criteria. But this project-by-project approval pattern made it

difficult to review total facility needs on an institution-wide basis. By mid 1967 it had become evident that the policy inaugurated in 1964, as described above, had ceased to work effectively because of the inability of the universities to find sufficient private support to finance “their share” of the cost of new construction. It became clear, both to the Committee of Presidents and to the Committee on University Affairs, that some more comprehensive long-term structure for capital financing was required. Given that such a general policy could not be established without much new information, it became evident that some revised policy was required for interim use.

Interim Capital Policy 1964-69

After careful study, the Committee on University Affairs recommended an interim policy covering the years 1964-1969 through which the Province of Ontario would provide 85 per cent of the first \$10 million and 95 per cent subsequently for approved capital projects. It was recommended that this improved level of support be provided not only for academic buildings and essential services but also for student unions, cafeterias, gymnasias, and similar buildings. The committee is pleased to learn that this policy has been accepted and, in all likelihood, will be instituted early in 1968.

Capital Study

While the adjustments described should be sufficient for interim use, there is considerable evidence that a new "formula" approach to capital financing will be required for the long term. In mid 1967 the Committee of Presidents recommended to the Committee on University Affairs that a joint study be undertaken to develop objective criteria and policies for financing university capital construction. The Committee on University Affairs welcomed this proposal and a joint committee was established to manage and direct the study, with three representatives named by the Committee of Presidents (A. K. Adlington, D. M. Hedden and W. G. Tamblyn), and three representatives named by the Committee on University Affairs (A. N. Bourns, R. W. Mitchell and D. T. Wright, Chairman), with J. D. McCullough, Director, Architectural Services Branch of the Department of University Affairs as Secretary.

Initial discussions had indicated that the work would necessarily include studies of enrolment projections, the preparation of an inventory of space and the development of measures of current space usage and, subsequently, the development of standards for space utilization. Further examination has indicated some other components and the Capital Studies Committee

is concerning itself with the following matters:

- a. *Enrolment*. It is intended to carry out studies of enrolment projections by individual institutions, as related to general projections for the Province as a whole, to provide a basis for estimating overall future capital needs.
- b. *Inventory and Space Utilization*. Whatever kind of policy may be formulated it will be essential to acknowledge the stock of physical resources available, and their condition, in determining new capital inputs. Given the size and complexity of the system, and the need for what amounts to a current inventory in perpetuity (reflecting change and new development) to provide a base for future policy operation, it seemed imperative that the inventory should be computer-based. To manage the development of the inventory, the joint committee has retained the firm, Taylor, Lieberfeld and Heldman (Canada) Limited. As well as developing a dynamic inventory system, the consultants will provide current measures of actual space utilization.
- c. *System Resources*. It is clear that such facilities as libraries, computers, and residences must be given special treatment on a consistent basis, even though the ultimate implications will necessarily affect the general form of the final capital policy formulation. It is indicated elsewhere in this report how these

special facilities are being studied.

- d. *Capital Policy Review.* Given that the problem of allocating capital to universities and colleges is of common concern to many jurisdictions in North America and Western Europe, it was decided to undertake a critical review of policies in a number of other jurisdictions in order that the superficial features of the various policies now in use might be judged against effectiveness as seen in terms of actual operation, influences on the universities, and the question of effective financial control.
- e. *Organization of Building.* It is clear that the traditional pattern of providing new building through the services of architects and consulting engineers retained by clients/owners, open tendering by general contractors, and so forth, is changing in the face of new kinds of pressure. Such concepts as “package deals”, design/execute tenders, construction management, and negotiated contracts, as well as system building, are all being explored and developed in the building industry. Considering the scale of building required for university development, it is clear that if better design and better building can be realized more economically through re-structured relationships, then such changes become imperative.

- f. *Design Criteria.* While building codes are intended to provide certain minimum levels of safety and quality, there are increasing indications that some radical re-thinking of design criteria are required to provide more effectively for flexibility of future use and occupancy, to acknowledge the likely probability that the economic life for non-monumental building is not more than 40 or 50 years, and to find ways of responding to the increasingly rapid rate of technical obsolescence of building equipment in building shells of greater life expectancy. System building has been developed for use for university construction in some other jurisdictions, notably in California and in Britain, but cannot yet be seen as a panacea.

With the kind of information likely to be developed from the separate studies outlined above, the Capital Studies Committee should be in a position to synthesize a general policy to recommend for use in Ontario with explicit or implicit space and design standards.

Considering the success and features of the formula system for distributing operating grants, and notwithstanding the complexity of capital funding, it is possible to speculate on the formulation of a capital policy roughly analogous to the operating grants formula. It might be possible to find unit capital costs appropriate for

different categories of university enrolment, which costs would, of course, escalate from year to year with building cost indices. Capital input requirement for a university could possibly then be readily determined as the difference between total capitalization need and the present value of the physical plant inventory. If such a form for the capital policy could be contrived it would, of course, have many of the features of the operating grants formula. Government would retain primary and pre-emptive control over total funding but individual institutions would be left with the widest latitude for determining the allocation of resources.

Space Management

It seems clear that space management in a large university with many kinds of undergraduate and graduate teaching and research programs presents a more difficult problem than that found in almost any other kind of organization or institution, not only because of total size but also because of the complexity of multi-use facilities. By contrast, large governmental or industrial organizations tend to have mostly fixed-function space, occupied more or less permanently.

With the prospect that, in the face of the need to limit capital input, levels of use will inevitably become more intensive. The continued growth

and increase in complexity of function of the larger universities in Ontario suggests a space management problem of fearsome complexity.

In the past several years Mr. J. F. Blakesley of Purdue University in Indiana has developed specialized management techniques of considerable sophistication for dealing with university scheduling and space management problems. The Committee on University Affairs, recognizing the relevance of this work to problems in Ontario, recommended, in response to a request from the University of Waterloo, that a special grant should be given to enable Waterloo to adopt and adapt the Blakesley techniques to the Canadian pattern and so serve as the means through which other Ontario universities may in due course develop similar capabilities.

University Residences

Until 1964 Provincial grants had not been made available for university residence construction. The rapid growth of university enrolment and the reduced availability of lodgings in private homes for university students in many communities made it evident that a large part of the expected future increase in enrolment would have to be housed in university residences. Accordingly, in 1964, on the recommendation of the Committee on University Affairs, a new policy

was inaugurated under which capital grants were provided for residences at the rate of \$1,400 a bed, provided that mortgage financing did not exceed \$4,200 a bed, with total cost limited to \$7,000 a bed.

This policy appeared to be only partly effective since there was a tendency for residence costs to rise above \$7,000 per bed, and substantial university contributions were required at a time when whatever funds universities could raise were more urgently required to support general development of teaching facilities.

Because of the growing pressure of need, the Province established the Ontario Student Housing Corporation in 1966 as an adjunct to the Ontario Housing Corporation, which had had substantial experience in providing public housing in the Province. Through some rationalization of building standards, and particularly through the advantages of large individual contracts and radical departures in the division of responsibilities for design and execution (through which tenders were called on a combined design/execute basis), the Ontario Student Housing Corporation has been able to provide university residences at costs much lower than had been achieved previously.

It is too early yet to know whether the residences provided by the Ontario Student Housing Corporation will be as satisfactory as some

would hope, but the advantage of lower cost is almost overwhelming. This is not only because of the need to concentrate resources in the expansion of teaching and service and amenities facilities on the campuses but also because of the conviction that university residences should be supported on a self-amortizing basis. This is, of course, argued because only a portion of the students have the benefit of living in residence and special subsidies for such residences would thus be discriminatory.

Whatever advances have been achieved in providing for residence requirements in universities, still further improvements appear in prospect. There is strong indication that students want lower costs and less institutionalization; that they might prefer "flats", which English experience shows can be less costly than conventional university residences. And it cannot be forgotten that cheapness is not economy; that good design is essential.

Postscript

This has been a fairly lengthy report, and necessarily is much concerned with detail. It has been difficult to convey adequately the sense of the excitement which is engendered by the pace of development and change in

university affairs in Ontario in these times.

Ontario is a fortunate place, rich in human and material resources. The people of Ontario need, deserve and seem prepared to pay for a system of higher education of quality, operating at a scale sufficient to meet the aspirations of its youth. The effectiveness of the effort to date will be for future historians to judge. What is clear now is that much has been done and much remains to be done.

Appendix

OC-4157/64

Copy of an Order-in-Council approved by His Honour the Lieutenant-Governor, dated the 17th day of December, A.D. 1964.

The Committee of Council have had under consideration the report of the Honourable the Minister of University Affairs, dated December 9th 1964, wherein he states that,

WHEREAS subsection (3) of Section 3 of the Department of University Affairs Act, 1964, provides that the Lieutenant-Governor in Council may appoint such committees or other consulting bodies as are deemed necessary from time to time;

AND WHEREAS it is expedient to establish a committee to study matters concerning the

establishment, development, operation, expansion and financing of universities in Ontario and to make recommendations thereon to the Minister of University Affairs for the information and advice of the Government;

The Honourable the Minister of University Affairs therefore recommends that a Committee on University Affairs be appointed, effective 19th November, 1964, to consist of twelve members, one of whom shall be Chairman, and any six of whom shall constitute a quorum; the said Committee to study matters concerning the establishment, development, operation, expansion and financing of universities in Ontario and to make recommendations thereon to the Minister of University Affairs for the information and advice of the Government.

The Committee of Council concur in the recommendation of the Honourable the Minister of University Affairs and advise that the same be acted on.

Certified,

A. V. Young,
Clerk, Executive Council.

